BMI May Underestimate Cardiovascular Risk in People With HIV

A new formulation of Egrifta, which is easier to administer, may help reduce visceral fat and improve metabolic health.

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Body mass index (BMI) alone may be a poor measure of cardiovascular disease risk for people living with HIV, underscoring the importance of screening for excess visceral abdominal fat, according to research presented at the Conference on Retroviruses and Opportunistic Infections (CROI 2025).

People with HIV are at greater risk for heart disease compared with the population at large. Weight gain, a known predictor of cardiovascular disease, is a growing problem among HIV-positive people. Excess visceral fat within the abdomen—often indicated by a large waist circumference—is more harmful to health than subcutaneous fat under the skin, and it is more difficult to lose with diet and exercise. BMI is a ratio of weight to height that does not necessarily reflect excess fat. Athletes, for example, may be incorrectly classified as "overweight" because they have a lot of muscle.

"There is abundant evidence of substantial weight gain and a high prevalence of obesity among people with HIV in the modern antiretroviral era," lead investigator Karam Mounzer, MD, chief scientific officer at Philadelphia FIGHT Community Health Centers, said in a Theratechnologies news release.

"Clinicians routinely use BMI as a marker to assess the risk of cardiovascular disease and other comorbidities in this population, but often overlook the importance of identifying excess visceral abdominal fat, or EVAF," he continued. "Our findings not only suggest that relying solely on BMI underestimates cardiovascular risk but show a high prevalence of EVAF among patients with normal BMI, which is an actual driver of such risk in people with HIV that many clinicians fail to capture in their clinics."

Theratechnologies markets Egrifta (tesamorelin), an injectable growth hormone-releasing factor analog that has been shown to reduce visceral abdominal fat and improve metabolic health in HIV-positive people with lipodystrophy (abnormal fat distribution). It is the only treatment approved by the Food and Drug Administration (FDA) to reduce excess abdominal fat in adults with HIV and lipodystrophy. A new formulation approved last month makes it easier to administer.

Mounzer's team conducted the VAMOS (Visceral Adiposity Measurement and Observation Study) trial to look at associations between BMI, EVAF and cardiovascular risk in people with HIV. EVAF was assessed using CT scans. At last year's IDWeek conference, the researchers reported that EVAF is one of several factors that contribute to heightened heart risk in HIV-positive people on modern antiretroviral treatment, and that Egrifta led to a modest reduction in 10-year atherosclerotic cardiovascular disease (ASCVD) risk scores.

The new analysis included 170 people with viral suppression on antiretroviral therapy for at least a year. The researchers compared 10-year ASCVD risk scores across four groups:

- 62 people with a low BMI (20 to 29.) without EVAF
- 52 people with a low BMI with EVAF
- 10 people with a high BMI (30 to 40) without EVAF
- 46 people with a high BMI with EVAF.

As expected, people with obesity (a BMI above 30) were most likely to have CT scans showing excess visceral fat. But EVAF was also found in 47% of those classified as overweight (BMI 25 to 29.9) and even in 43% of those classified as normal weight (defined here as a BMI of 20 to 24.9).

People with more visceral abdominal fat had higher 10-year cardiovascular risk scores than those without EVAF regardless of BMI. What's more, high levels of pericardial fat within the heart muscle were mainly seen in people with high EVAF levels.

CT scans are expensive and not readily available from primary care providers, but waist measurement is an acceptable alternative.

These results "underscore that if healthcare providers focus solely on BMI, a sizeable population of normal-weight and overweight individuals with HIV and EVAF will be missed," said Christian Marsolais, PhD, Theratechnologies senior vice president and chief medical officer. "We hope this study encourages the use of simple and more precise tools for assessing EVAF, such as measuring waist circumference, as a proven means of identifying people with HIV who are at risk of cardiovascular disease."

New Egrifta Formulation

Egrifta is administered by self-injection in the abdomen once daily. In 2019, TheraTechnologies introduced a new formulation, dubbed Egrifta SV, that is easier to prepare and is stable at room temperature, so it doesn't require refrigeration. But it still needed to be reconstituted from a vial before each shot.

On March 28, the FDA approved a newer formulation, Egrifta WR (also known as tesamorelin F8),

that only needs to be reconstituted once a week, yielding enough for seven daily injections. The more concentrated version requires less than half the administration volume of Egifta SV, according to TheraTechnologies. Pharmacokinetic studies showed that Egrifta WR is bioequivalent to Egrifta SV, meaning it is expected to work equally well.

“We are pleased to offer this improved, more convenient version of tesamorelin for injection to help people with HIV and their healthcare providers more effectively manage comorbidities like lipodystrophy, which today often presents as central adiposity,” Marsolais said in a news release. “Egrifta WR enables a simplified administration and an improved patient experience, which are important considerations for people living with HIV.”

“Central adiposity, characterized by the accumulation of excess visceral abdominal fat, is a common complication for people with HIV that may result from the virus itself, from certain older antiretrovirals and from a reduction in growth hormone concentrations,” added David Alain Wohl, MD, of the University of North Carolina at Chapel Hill. “Given the significant impact of EVAF on health and quality of life for many of our patients with HIV, and the importance of maintaining lean muscle mass especially as we age, a new, more conveniently dosed formulation of tesamorelin is a welcome advancement.”

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